PROCEEDINGS

OF THE

SCIENTIFIC MEETINGS

OF THE

ZOOLOGICAL SOCIETY

OF LONDON

FOR THE YEAR

1877.

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Anchonus galapagoënsis, *G. R. Waterh.*
Diabrotica limbata, *C. Waterh.*
Scymnus galapagoënsis, *G. R. Waterh.*

3. Chatham Island.

Creophilus villosus, *Grav.*
Bostrichus uncinatus, *Germ.*[1]
Ammophorus galapagoënsis, *G. R. Waterh.*
Pedonœces pubescens, *G. R. Waterh.*

4. Charles Island.

Selenophorus galapagoënsis, *G. R. Waterh.*
Eunectes occidentalis, *Er.*
Acilius incisus, *Aubé.*
Tropisternus lateralis, *Fabr.*
Acribis serrativentris, *C. Waterh.*
Phalacrus darwinii, *C. Waterh.*
Stomion galapagoënse, *G. R. Waterh.*
Ammophorus cooksoni, *C. O. Waterh.*
Ormiscus variegatus, *G. R. Waterh.*
Otiorhynchus cuneiformis, *G. R. Waterh.*
Docema galapagoënsis, *G. R. Waterh.*

5. The particular island not specified.

Feronia calathoides, *G. R. Waterh.*
Feronia insularis, *Bohem.*
Feronia galapagoënsis, *G. R. Waterh.*
Amblygnathus obscuricornis, *G. R. Waterh.*
Copelatus galapagoënsis, *G. R. Waterh.*
Philhydrus, sp.
Copris lugubris, *Bohem.*
Oryctes galapagoënsis, *G. R. Waterh.*
Physorhinus galapagoënsis, *G. R. Waterh.*
Stomion helopoides, *G. R. Waterh.*
Stomion lævigatum, *G. R. Waterh.*
Ammophorus obscurus, *G. R. Waterh.*
Pedonœces galapagoënsis, *G. R. Waterh.*
Pedonœces morio, *Bohem.*
Phaleria manicata, *Bohem.*
Eburia amabilis, *Bohem.*

VIII. Hymenoptera and Diptera. By Fred. Smith.

The Hymenoptera collected by Commander Cookson are referable to two species. Three other species collected by Mr. Darwin during the Voyage of the 'Beagle,' specimens of which were quite recently deposited in the British Museum by G. R. Waterhouse, Esq., may be added on this occasion.

[1] The "*Apate*" mentioned by Mr. Waterhouse, Ann. and Mag. Nat. Hist. 1845, xvi. p. 36.

Pp. 82-84 in: Günther, A. Smith, F. 1877
Account of the Zoological collection made during the visit of
H.M.S. "Peterel" to the Galapagos Islands.
Proc. Zool. Soc. Lond. 1877: 64-93 [6 February 1877]

1. CAMPONOTUS SENEX, Smith, Cat. Hymenopt. part vi. p. 47.
From Charles Island (*W. E. Cookson*).

2. CAMPONOTUS PLANUS.

Worker. Length, $1\frac{3}{4}$ line. Black, with the legs, antennæ, and mandibles ferruginous; thinly sprinkled with pale glittering hairs. Head slightly shining, oblong, a little wider than the thorax, with the eyes prominent and situated high at the sides near the vertex. Thorax rounded anteriorly, flattened above, and gradually narrowed to the metathorax, which is truncate behind; the sutures dividing the pro-, meso-, and metathorax only slightly impressed. Abdomen ovate, semiopaque; the node of the petiole incrassate, narrow, the sides nearly parallel, rounded above.
Charles Island (*C. Darwin*).

3. CAMPONOTUS MACILENTUS.

Worker. Length, $2\frac{1}{4}$ lines. Pale ferruginous, with the legs pale testaceous, smooth and shining, and having a few erect scattered pale hairs. The head wider than the thorax, oblong, with the eyes large, ovate, and black; the vertex slightly emarginate behind. Thorax compressed and much narrowed behind, convex above. Abdomen wider than the head, and oblong-ovate. The scale of the petiole wedge-shaped and rounded above.
Charles Island (*C. Darwin*).

4. AGRIOMYIA VAGANS.

Female. Length 2 lines. Head and thorax rufo-piceous; abdomen pale ferruginous, smooth and shining. Head oblong, the vertex rounded behind; the mandibles and antennæ paler than the head. Thorax a little longer than the head, deeply strangulated between the pro- and metathorax; the former rounded in front and very convex; the metathorax abruptly truncated obliquely; the legs rufo-piceous, with the tarsi and the articulations pale testaceous; the tibiæ paler than the femora and spinose exteriorly. Abdomen oblong, cylindric, and one third longer than the head and thorax, mottled with dark rufo-piceous stains; the second segment with three or four transverse impressed lines; the apex acute.

On comparing this insect with females of the different genera into which the genus *Thynnus* has been divided, it appears from its general structure to belong to the genus *Agriomyia* of Guérin.

Charles Island (*C. Darwin*).

5. XYLOCOPA MORDAX, Smith, Trans. Ent. Soc. Lond. 1874, p. 294, ♀.

Male. Length 8 lines. Ochraceous, the ocelli and mandibles black, the latter with a yellow spot at their base; the clypeus with a rufo-fuscous longitudinal line in the middle; the antennæ fuscous above; the pubescence fulvous. The mesothorax smooth and shining on the disk, as is also the scutellum; both nearly impunctate, having only a few very fine punctures: the mesothorax blackish on each

side and closely punctured. Wings fulvo-hyaline, their nervures dark ferruginous; the femora rufo-piceous, palest towards their apex; the pubescence on the thorax and legs fulvous. The apical margins of the segments of the abdomen rufo-piceous; the pubescence fulvous.

Albemarle Island, Charles Island (*W. E. Cookson*).

Of DIPTERA, Commodore Cookson collected two species in Charles Island, one being the *Musca ochricornis* of Wied., the other apparently new—

SYRPHUS ALBOMACULATUS.

Length 4 lines. The front covered with silvery tomentum, as well as the posterior margin of the head behind the eyes. The thorax of a metallic blue-green; the scutellum rufo-piceous, with its posterior margin pale testaceous. Wings hyaline and splendidly iridescent; the nervures dark fuscous. The legs rufo-piceous, with the anterior tibiæ, the base of the intermediate and posterior pair, and also the tips of the femora pale rufo-testaceous. Abdomen blackish brown, smooth and shining; at the base of the second and third segments laterally a large white isoseeles-triangular macula.

IX. NEUROPTERA. By R. MCLACHLAN.

Only two species collected; both are Dragonflies, belonging to the subfamily *Libellulina*.

1. PANTALA HYMENÆA.

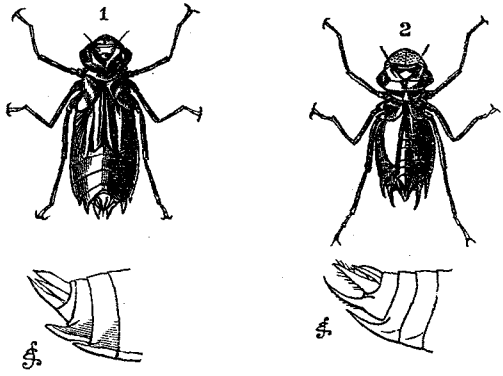
Libellula hymenæa, Say, Journ. Acad. Philad. vol. viii. p. 19.
Pantala hymenæa, Hagen, Neurop. N. Amer. p. 142.

One individual. In the 'Neuroptera of North America,' Hagen records this only from Indiana, Western Texas, and Mexico. Later on, in his "Synopsis on the *Odonata* of America" (Proc. Bost. Soc. Nat. Hist. vol. xviii. May 1875), he adds Illinois and Cuba as localities. In the 'Entomologist's Monthly Magazine,' vol. xi. p. 92 (September 1874), I noted that Mr. G. F. Mathew, R.N., found the species at Payta, Peru, and says of it:—"This fine species occurred along the sea-coast. I cannot imagine where the larvæ fed, as there was no fresh water within many miles of Payta, and rain is almost unknown there. Just above high-water mark, in some places, there were large patches of a species of *Mesembryanthemum*; and these dragonflies were always to be found hawking above them." I possess an example from Chili. There can be little doubt that the species is migratory, though not to the same extent as its congener *P. flavescens*, which is found almost all over the world.

2. TRAMEA, sp.?

Three individuals. As these examples are in bad condition, and having regard for the difficulties that surround the group, I do not venture to describe them, although they possibly pertain to a new species, of large size (almost as large as *Pantala hymenæa*), and with

only a very small dark anal spot on the hinder wings, in this latter character differing from most of the species of Central America.



There are also two "nymph"-forms, which I was at first inclined to consider only conditions of one species, but which I am now convinced represent the nearly mature condition of two; and it may be that they pertain to the *Pantala* and *Tramea* respectively.

The larger form (*Pantala*?) (fig. 1) may be described as follows:—

Length, 23 millims. Body above (exceptiug the eyes and anal processes) uniformly opaque, pulverulent, brownish grey; beneath, dingy yellowish and shining. Eyes yellowish. Mask of labium elongate, its anterior edge forming a triangle with obtuse apex. Mandibles very large and prominent, standing out much in advance of the front of the head, their interlocked edges with about eight rather blunt teeth; very convex externally, forming (with the mask) a gibbous projection. Head above with a large and deep triangular depression behind the region of the ocelli. Pronotum with rounded hinder margin. Anterior rudimentary wings very narrow, lanceolate, extending to the hinder suture of the sixth abdominal segment; posterior broad in the anal portion, rather longer than the anterior. Abdomen short and broad, a small black triangular spot in the middle of the hinder suture of each ventral segment; the alate marginal portion very broad if viewed from beneath. Eighth segment produced at the sides into a strong flattened acute tooth, furnished with small distant spines on the edge. Ninth produced into a much longer and broader curved tooth, broadly triangular at its base, also with small spines on its edge. The form of the anal valves &c., is as follows:—Median dorsal process long and very strong, its sides dilated and triangular at base, the upper edge forming a sharp keel. Lateral superior processes slender and much shorter. Lateral inferior processes long, lanceolate, and very acute, scarcely shorter than the median dorsal process, slightly curved. All the anal processes shining, and dingy yellowish. Legs slender, not especially long, concolorous with the body; but on the femora and tibiæ there are indications of broad fuscescent rings, and the intermediate and posterior tarsi are blackish.